

**THE EFFECT OF PEEL EXTRACT AND POMEGRANATE JUICE  
(*Punica granatum L.*) ON ANTIBODY TITERS OF AYAM  
KAMPUNG SUPER IN VACCINES  
NEWCASTLE DISEASE.**

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**ABSTRACT**

This study aims to determine the effect of peel extract and pomegranate juice on antibody titer of ayam kampung super vaccinated *Newcastle Disease*. This study used a completely random design (CRD). The sample consisted of 40 ayam kampung super were randomly into four treatment groups. K- treatments were not vaccinated. K +, P1 and P2 vaccinated with ND Lasota. Then, after antibody titer is low, K- was given with sterile distilled water, K + given with 0.5% CMC-Na, P1 given peel extract (200 mg / kg BB), P2 given with pomegranate juice (3 ml / kg BB). Samples of serum in HI test to determine antibody titer. Result obtained average number of antibody titers in the first test for the K- is 1.10<sup>a</sup>, K + is 4.60<sup>b</sup>, in P1 is 5.90<sup>c</sup>, and P2 is 7.20<sup>d</sup>. On the second test of antibody titer of K- is 0.20<sup>a</sup>, K + is 4.90<sup>b</sup>, in P1 is 6.50<sup>c</sup>, and P2 is 8.00<sup>d</sup>. There are significant differences regarding an increase of antibody titer in each treatment. Based on the results it can be concluded that there was influence of peel extract and pomegranate juice to ayam kampung super antibody titres vaccinated by *Newcastle Disease*. It is suggested to used pomegranate juice because it is more effective to increase antibody.

**Keywords :** White pomegranate (*Punica granatum L.*), *Newcastle Disease*, Antibody titers.